

REMARKS

The specification has been amended as indicated above to replace the term "dilaureate" with the term "dilaurate". Claims 1-33 are pending in this application. Claims 14-27 have been withdrawn. Claims 1-4 have been amended herein. Claims 28-33 are new claims.

In the Office Action mailed November 3, 2005, (hereinafter "Office Action") the examiner has rejected Claims 2-5 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Specifically the Examiner has stated that the intended scope of the phrase "and the like" in Claim 2, cannot be determined. Applicant has amended Claim 2 to remove the phrase "and the like". In view of this amendment to Claim 2, withdrawal of this rejection is respectfully requested.

With regard to Claim 3 (and Claim 5 by dependency), the Examiner has stated "the meaning of 'R represents an R radical' is not understood." (Office Action, page 3, paragraph 4). Applicant has amended Claim 3, and thus Claim 5 by dependency, to replace the phrase "R radical" with the phrase "R' radical". Support for this amendment can be found at page 8, line 2 of the specification. In view of this amendment withdrawal of this rejection is respectfully requested.

With regard to Claim 4, the Examiner has stated "the meaning of the vertical line is not understood; however, this feature appears to be an improperly formatted bond connecting the OH

group with an unknown location on the subsequent structure", (Office Action, page 3, paragraph 4). The applicant has amended Claim 4 to show the proper attachment of the OH group.

Support for this amendment can be found in the structure disclosed at page 8, lines 9-11. In view of this amendment withdrawal of this rejection is respectfully requested.

The Examiner has rejected Claims 1-5 and 7-13 under 35 U.S.C. § 102(b) as anticipated by Roodvoets U.S. Patent No. 3,939,133 (hereinafter "Roodvoets"). The Examiner has failed to appreciate the difference in chemistries between that disclosed in Roodvoets and the currently claimed invention.

Firstly, Roodvoets discloses "high vinyl rubbers are cured through the use of synergistic peroxide combinations" column 2, lines 6-7. The currently claimed invention is a process for producing a silane-crosslinked thermoplastic polymer. The only disclosure in Roodvoets of a silane compound is at column 6, line 17, where without explanation, Roodvoets discloses "vinyl triacetoxysilane". Applicant can only presume as to the purpose of vinyl triacetoxysilane being included in the composition of Roodvoets. There is no disclosure of the silane of Roodvoets being used in a process for producing a silane-crosslinked thermoplastic polymer. Roodvoets discloses only using "1.0 parts of vinyl triacetoxysilane per 100 parts of filler." (column 6, lines 17-18). On the contrary, applicant's invention expressly requires a great deal ("loading levels of from about 50 % to about 99.9%", (page 13, lines 19-20)) of silane possessing an unsaturated organic function.

It is noted to the examiner that Roodvoets discloses a solid composition (high vinyl rubber) while the currently claimed invention provides for a liquid silane-crosslinked

thermoplastic polymer. It is also noted to the examiner, that in addition to the other claims, Claim 2, contains patentable subject matter. The polyolefins listed in Claim 2 are saturated polyolefins. The materials disclosed in Roodvoets are high vinyl rubbers (Column 2, lines 6-17), which by conventional definition contain appreciable amounts of unsaturated moieties. Roodvoets does not expressly or inherently disclose the use of saturated polyolefins.

Secondly nowhere in Roodvoets is there any disclosure of a metal catalyst conventionally used in the hydrolysis/condensation reactions involved in the production of a silane-crosslinked thermoplastic polymer, such as is disclosed in the currently claimed invention. This absence of the necessary metal catalyst in Roodvoets makes an even clearer showing that the currently claimed invention is chemically and thus patentably distinct from Roodvoets. It is further noted to the examiner, that new Claims 28-33 claim the use of said metal catalysts, which are not expressly or inherently disclosed in Roodvoets. Therefore it is asserted that new Claims 28-33 also contain patentable subject matter over Roodvoets.

Thirdly, the Examiner has stated that "The reference has not reported the presence or absence of moisture; however, this feature appears to be inherent because no attempt to exclude moisture was reported in the reference, and therefore at least some moisture would be present." (Office Action, page 3, paragraph 6 to page 4 paragraph 6). Nowhere in Roodvoets is there any express or inherent disclosure of moisture of any kind. It is a well established point of law that "Inherent anticipation requires that the missing descriptive material is 'necessarily present', not merely probably or possibly present, in the prior art" *Trintec Industries Inc. v. Top-U.S.A. Corp.*, 295 F.3d 1292, 1295, 63 USPQ2d 1597, 1599 (Fed. Cir. 2002) quoting *In re Robertson*, 169 F.3d 743, 745, 49 USPQ2d 1946, 1950-51 (Fed. Cir. 1999). Roodvoets does not require that moisture

is necessarily present. On the contrary, Roodvoets states "Samples according to formulations set forth in Table I were prepared by solution mixing in a Hobart Mixer followed by vacuum drying." Column, 5, lines 66-68. Therefore, any atmospheric moisture that may have been present in the composition of Roodvoets would have been substantially or totally eliminated as a result of the vacuum drying step. Furthermore, applicant's specification states "the rate of crosslinking may be hastened if desired by the use of an artificially moistened atmosphere or liquid water." page 12, lines 7-8. Nowhere in Roodvoets is there any express or inherent disclosure of an artificially moistened atmosphere or liquid water that is necessarily present. Applicants have thus clearly shown that the presence of moisture is not necessarily present in Roodvoets as is needed for inherency anticipation.

In view of the foregoing remarks, withdrawal of the rejection of Claims 1-5 and 7-13 is respectfully requested.

The Examiner has rejected Claims 1-13 under 35 U.S.C. § 102(b) as anticipated by Dawans et al. U.S. Patent No. 4,255,524 (hereinafter "Dawans et al."). Once again, the Examiner has failed to appreciate the difference in chemistries between that disclosed in Dawans et al. and the currently claimed invention.

Firstly, Dawans et al. discloses syntactic foam compositions (Abstract). Dawans et al employs "a mixture of inorganic or organic hollow spheres of appropriate size with a resin consisting at least in part (at least 10% by weight) of polybutadiene" column 2, lines 13-15. The inorganic hollow spheres of Dawans et al. contain hydroxyl functionality on their surfaces, which reacts with the alkoxy silane of Dawans et al. to assist in the bonding of the inorganic

spheres to the polybutadiene resin. Dawans et al notes this in his disclosure when he states "The addition of comonomers which improve the adhesion of the resin to the hollow spheres is also advantageously contemplated; there is used, for example, vinyl-triethoxysilane, vinylsilane, vinyl tris (2-methoxyethoxy) silane or γ -methacryloxypropyltrimethoxy silane." (column 4, lines 1-6). Dawans et al thereby produces a solid foam material. On the contrary, the silane of the currently claimed invention is crosslinked to the thermoplastic polymer to produce a liquid silane-crosslinked thermoplastic polymer, which in essence is a polysiloxane material. The currently claimed invention does not include any requirement of inorganic spheres.

It is also noted to the examiner, that in addition to the other claims, Claim 2, contains patentable subject matter in that all of the polyolefins listed in Claim 2 are saturated polyolefins while the materials disclosed in Dawans et al are polybutadienes (Column 2, lines 6-17), which by conventional definition contain appreciable amounts of unsaturated moieties. Dawans et al. does not expressly or inherently disclose the use of saturated polyolefins.

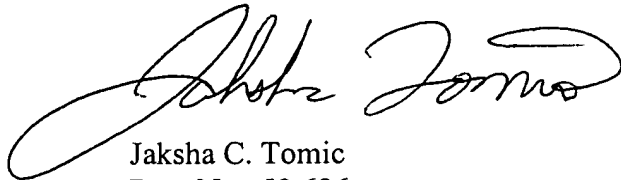
Secondly nowhere in Dawans et al is there any disclosure of a metal catalyst conventionally used in the production of a silane-crosslinked thermoplastic polymer, such as is disclosed in the currently claimed invention. This absence of the necessary metal catalyst in Dawans et al. makes an even clearer showing that the currently claimed invention is chemically and thus patentably distinct from Dawans et al. It is further noted to the examiner, that new Claims 28-33 claim the use of said metal catalysts, which are not expressly or inherently disclosed in Dawans et al. Therefore it is asserted that new Claims 28-33 contain patentable subject matter over Dawans et al.

Thirdly, the Examiner has stated that "The reference has not reported the presence or absence of moisture; however, this feature appears to be inherent because no attempt to exclude moisture was reported in the reference, and therefore at least some moisture would be present." (Office Action, page 4, paragraph 7). Nowhere in Dawans et al. is there any express or inherent disclosure of moisture of any kind. It is a well established point of law that "Inherent anticipation requires that the missing descriptive material is 'necessarily present', not merely probably or possibly present, in the prior art" *Trintec Industries Inc. v. Top-U.S.A. Corp.*, 295 F.3d 1292, 1295, 63 USPQ2d 1597, 1599 (Fed. Cir. 2002) quoting *In re Robertson*, 169 F.3d 743, 745, 49 USPQ2d 1946, 1950-51 (Fed. Cir. 1999). Dawans does not require that moisture is necessarily present. On the contrary, the composition of Dawans is "degassed under reduced pressure" (Column 6, line 4). Therefore, any atmospheric moisture that may have been present in the composition of Dawans et al. would have been substantially or totally eliminated as a result of the degassing step. Furthermore, applicant's specification states "the rate of crosslinking may be hastened if desired by the use of an artificially moistened atmosphere or liquid water." page 12, lines 7-8. Nowhere in Dawans et al. is there any express or inherent disclosure of an artificially moistened atmosphere or liquid water that is necessarily present. Applicants have thus clearly shown that the presence of moisture is not necessarily present in Dawans et al. as is needed for inherency anticipation.

In view of the foregoing remarks, withdrawal of the rejection of Claims 1-13 is respectfully requested.

An early favorable examination on the merits of the subject matter of Claims 1-13 and 28-33 is respectfully requested. Please charge the required fee to Deposit Account No. 07-0888. Also in the event that any extensions of time are required please treat this paper as a petition to extend the time as required and charge Deposit Account No. 07-0888.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Jaksha C. Tomic', with a large, stylized flourish at the end.

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